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LECTURES ON HERNIA, GIVEN AT THE CITY HOSPITAL, BOSTON.

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No. IV.—*On Irreducible and Strangulated Hernia.*

IF the diagnosis be clearly made out, we shall find that hernia, in all the conditions we have previously spoken of, as reducible, irreducible, or strangulated, requires a certain definite treatment. Apart from any procedure for a radical cure, all reducible herniæ require the application of trusses. We believe this rule to be without exception.

The same scepticism which doubts the usefulness of medicinal remedies in disease, cannot be carried into the department of surgery. Here we see plainly that unless we act promptly and understandingly the worst results will follow. A rupture or a fracture cannot be safely treated by expectancy; and the too great trust reposed in nature, by neglecting to apply artificial pressure to retain the bowels which she has extruded through inherited deficiency, cannot be too severely reprobated. Too much importance cannot be attached to the prompt and efficient treatment of hernia, as soon as it is discovered. We apply a truss to a reducible hernia for two reasons: first, to insure the patient against the risks of strangulation; second, to assist nature to cure the infirmity. Of the second reason we have already spoken. The risks which a rupture entails are so great that it would seem idle to argue on the necessity of a truss; and yet we hear of physicians who say to mothers, that they need not concern themselves about a congenital rupture in their children, as the bowel will go up, and take care of itself. Now, apart from treatment for a radical cure, and apart from the risks of strangulation, there is another grave reason why a truss should always be applied at once—and that is, that a hernia which stays down long soon contracts adhesions: first, of the sac to the neighboring tissues; next, of the bowel to the sac. And we have, before we are aware of it, an irreducible rupture, which cannot be cured, which cannot be returned, which cannot bear truss pressure and

which, while in constant danger of incarceration, is more dangerous to operate upon, for the relief of strangulation, than any other.

It sometimes happens that these irreducible herniæ contain omentum, instead of intestine; when this is the case they are of much less consequence. If the diagnosis be perfectly clear, and the tumor large and unwieldy, it may sometimes be removed with safety by excision. This is also true of irreducible herniæ through the umbilicus.

In any case of rupture, it is of importance to determine whether the sac contains omentum or bowel. Not unfrequently both are present; and it occasionally happens that the intestine is strangulated by the omentum. The differential diagnosis is not always easy. Intestine may be tympanitic, convoluted, elastic, and having the sounds and feeling of air and water together. It has also a more direct, thrilling impulse. Omentum is insensible, flat on percussion, doughy and inelastic. When reducible, they return into the abdomen differently: intestine with a gurgle and sudden collapse; omentum more slowly, evenly, and without noise. A mixed case is hard to distinguish; and it often happens that the omentum is irreducible and adherent, although the bowel goes back.

Other causes than those inherent in the rupture itself may prevent its reduction. A woman was brought into the Hospital last year, who had ascites and a double inguinal and single femoral hernia. The ruptures could not be returned, and she entered for symptoms of commencing incarceration. Here it was evident that the three ruptures were caused and prevented from reduction by the dropsy in the peritoneal cavity, which had dilated the rings and forced out the bowel. The fluid was drawn off by a trocar; and the ruptures returned readily, and were retained by trusses.

If an irreducible hernia become incarcerated and inflamed, the first symptoms are a stoppage in the peristaltic action of the bowels, with colic, and heat, swelling and pain in the hernial sac. It soon becomes much distended, red and shining; and unless the symptoms subside, will end in mortification and fæcal fistula, if not in death. We cannot return the bowel, and an operation is in such a case the very last resort.

A few months since a man was brought to the Hospital in this condition, who had a large, hard, reddened scrotal tumor, tender on pressure, and irreducible, with colic and constipation. The history was that of an irreducible hernia of many years' duration. A warm bath, fomentations, opium and perfect rest eventuated in a subsidence of the inflammation and a resumption of the functions of the bowel. The popular idea in such cases is to give purgatives, as it is in internal stoppage, or intussusception. Nothing could be worse to do. The bowels cannot move until relieved of stricture, and the cathartic only increases the action of the muscular coat, and hence the spasm and incarceration. Opium, fomentations and time are the great remedies in an *irreducible*, strangulated hernia; but they must *not* be

relied on for a strangulated hernia which occurs *de novo*, or was *reducible* before. In these cases, time is the patient's worst enemy rather than his friend.

If milder means fail in subduing the inflammation in an incarcerated, irreducible hernia, we must not hesitate to operate, although the operation is fraught with far greater dangers than in an ordinary, reducible hernia become strangulated. We cannot probably return the bowel, and we have to leave open a large, hernial sac, with its contents. This risk, however, must be run sometimes. More than this, a case may occur where there are symptoms of peritonitis, and some evidence of an irreducible hernia, when it becomes our duty to cut down and see if stricture exists.

Sept. 22d, 1865.—A. W. C., æt. 18, after exposure to cold and wet, was seized with a chill on the 19th, followed by fever, and pain in the right iliac region. All symptoms now aggravated. On examination, a local bulging of the abdominal wall noticed just above the ilium. Hernia in the left scrotum, although the testicle had not descended; but rupture seemed soft, and partially reducible. On the 23d, he was worse, with pain and delirium. Pulse 100.

24th.—Still delirious. Pain and tenderness all over abdomen. Lies with his knees drawn up; breathes rapidly; expression anxious; pulse 160, and feeble; vomits drinks. After a consultation, it was thought advisable to cut down over the neck of the hernia—which could be felt to be irreducible—to see if there might not be a knuckle of intestine strangulated. An incision having been made down to the sac by Dr. Thaxter, as soon as the sac was opened, a purulent, serous fluid ran out. No strangulation was found. The hernial tumor was composed of a small piece of intestine, a piece of omentum and a small, soft testicle, with a vaginal sac below it. By some arrest of development, the testis seemed to have remained in the canal, although a sac was opened down towards the scrotum.

The patient sank and died, and, on opening the abdomen, general peritonitis was found, which radiated from the cœcum and vermiform appendix. No foreign body in the latter.

It would seem as if the symptoms of *strangulation* were plain enough not to be overlooked, and yet they often are. Particularly is this the case with female patients, by whom the existence of a small femoral hernia may be unknown, or concealed from false pride. The physician, therefore, should always be on his guard in such cases. The symptoms of strangulated hernia are, first, general distress; then colicky pains, constipation, except a discharge takes place once or twice from below the stricture, and, finally, a reversal of the peristaltic action of the bowels and stercoraceous vomiting. With this, prostration, a cool, clammy skin, hiccough, a thready pulse, collapse, and ultimate death, unless relieved.

The stricture may take place either at the inner ring, the inguinal canal, the outer ring, or at the *neck* of the sac wherever situated,

or in any constriction of the sac itself, or, finally, from one part of the contents of the sac, as the omentum, constricting the bowel which is with it. In femoral hernia the strangulation takes place either at the crural or the saphenous opening.

Occasionally, but very rarely, a strangulated hernia, which resists taxis, returns spontaneously, without an operation.

A patient was brought to the Hospital with strangulated hernia, which had been down thirty-six hours. There was no action of the bowels; pain and prostration, and vomiting of everything taken—at first bilious, then of grumous matter. The hernial tumor was small, hard, and resisted all taxis. He refused an operation. The next morning he was worse, and the tumor had a dusky, red hue, and the feeling of containing serum. Still obstinately refused an operation. He was therefore sent home. In the course of the next night the bowel returned of itself, and he recovered. Few people, appreciating the chances of both, would have taken that man's risks rather than the risks of an operation.

The *taxis*, or reduction of the hernia by direct manipulation, is always the first method tried with a reducible rupture which has become strangulated. It should always be done under ether, with the patient on his back and with the legs raised, to relax the fascia in the groin; the pressure should be gentle, and not too long continued. We should manipulate the neck of the rupture with one hand, and push up the fundus with the other. In an oblique inguinal rupture the taxis should be directed upwards and outwards; in a direct hernia, backwards; in a femoral hernia, downwards, backwards and upwards. No precise rule can be given as to how much force should be used, or how long continued. We should rather err, ourselves, on the side of gentleness; believing, as we do, that more harm is done by injudicious and violent manipulation, and by delay, than by an early operation.

Of eight strangulated herniæ brought into this Hospital, one returned spontaneously, two were reduced by taxis, and five required an operation. It is true that this average of only one fourth reduced by taxis may be too small for general practice, since cases come to a hospital only as a last resort. The taxis, then, should be tried fairly, and all the other adjuvant methods we are about to mention, but not too long.

A long-continued hot bath, with an opiate enema, or opium by the mouth, often relaxes the parts so that taxis will succeed. In the same way ether acts efficiently. Ice, or even a freezing mixture, applied over the sac, may contract the rupture so that it will return into the abdomen. Inverting the patient has been sometimes successful; although there is some danger of tearing the bowel if it have become softened by long and tight constriction. Insufflation through the rectum of air by a pair of bellows, or with a common rubber enema syringe, until the intestines are fully distended, has several times

succeeded in withdrawing the strangulated knuckle of intestine. It has, also, many times failed, and seems open to the same objection of danger of rupturing the weakened bowel, as the treatment by inversion.

We must not lose too much time in these efforts. Cooper says that if he had femoral rupture down and strangulated, he would not let more than twelve hours pass without an operation, if other means failed. A small rupture, with a narrow neck and small rings, is much more liable to become strangulated than a large one. A femoral is, for the same reason, more dangerous than an inguinal hernia. A congenital hernia, or a large, old rupture, both having wide necks and rings, more rarely become strangulated.

There are two ways of operating, with or without opening the sac: the former, the older and classical and most widely approved method; the latter, the operation of Petit, revived by Mr. Luke, and other modern surgeons. If we can avoid opening the sac, we avoid the great risk of peritonitis; and, on the other hand, we run the risk of returning the hernia with the stricture uncut, or the bowel mortified. In femoral hernia, where the seat of stricture is frequently at the saphenous opening, we can operate more successfully without opening the sac than in inguinal hernia.

"The advantages of leaving the serous membrane entire," says Mr. Syme, "seem more than counterbalanced by the risk of wounding the intestine in dividing the stricture, of returning the strangulated parts in an improper condition, or the mischief that may arise from abortive attempts at reduction, when it is impeded by adhesions." Unless in a recent femoral hernia of small size, strictured at the saphenous opening, we should think it wisest to open the sac. When the sac is cut, there is often a gush of serum, the result of over-secretion from its peritoneal surface, and due to irritation. In any form of inguinal hernia, the stricture should be divided upwards; and in femoral hernia, upwards and inwards.

What disposition to make of a partly mortified bowel, has always been difficult to decide. Under how great a degree of congestion and strangulation, as shown by its various shades of color, it may be safe to return the bowel into the abdomen, each one must judge for himself. According to the views of Mr. Hutchinson, recently expressed in the London Hospital Reports, Vol. II., all patients operated on for strangulated hernia who die, die of peritonitis induced by the damaged intestine. We have, ourselves, seen a patient recover perfectly in whom the bowel was of a dark, beet color. When the bowel is really mortified, there is no question that it ought not to be returned, but left outside to form a fæcal fistula. A graduated compress and spica bandage may be applied over the site of operation, if the bowel be returned; if not returned, the external parts should be let alone. The mortality of the operation for strangulated hernia is between 40 and 50 per cent. Of our five cases of opera-

tion, three died. We will conclude with a condensed report of these cases, from the Hospital Records, and a few remarks upon them.

Case I.—Anne M., æt. 37. Strangulated femoral hernia for six days. Constipation, vomiting, singultus, during that period. Disease not recognized. Treated by cathartics. Now, a hard tumor, as large as an English walnut, in femoral region; skin red and ecchymosed. Under ether, gentle attempts at taxis were ineffectual; it was not thought justifiable to carry them far, for fear of rupturing the bowel. The sac was cut down on and opened. Bloody serum flowed from it. Sac found irreducible, and the intestine, which was of a light chocolate color, was adherent to the sac. The adhesions were carefully divided, and the bowel, apparently, freely returned into the abdomen. But little relief to symptoms after operation. She died on the sixth day. Autopsy.—Intestine found *still constricted* by peritoneum at the inner edge of the crural opening. Hernia sloughy, and intestine adherent to sac.

Case II.—Eleanor F., æt. 38. Strangulated inguinal hernia. Three days since hernia got down, having always been reducible before, and yesterday colicky pains and vomiting set in. A hard tumor, size of an egg, now in right groin; tender on pressure; seemed to recede somewhat after taxis for fifteen minutes. The pain diminished, vomiting ceased, and she slept. The next morning taxis was renewed, under ether, without much effect. A large enema ordered. The next day, some vomiting; less pain; pulse 84. On the third day since entrance she became worse, with tympanites; vomiting and growing weaker. The operation for strangulation was done by Dr. Thaxter. Sac opened; serum in sac, which was thickened; no adhesions; intestine dark brown; stricture divided at external ring; bowel gently and easily reduced. A few minutes after, accidental pressure having been made on the abdomen, liquid fæcal matter ran out. It was evident that the bowel had ruptured. She died in a few hours. No autopsy.

Case III.—Mrs. S. H., æt. 40. Strangulated femoral hernia for twelve hours. Hernia of a year's duration. Never worn truss. Vomiting and colic all day. Repeated and violent attempts at taxis had been made before she came to Hospital. Now, countenance anxious and flushed; pulse quick; vomiting and pain. Hernia larger than an egg, in crural region, firmly fixed, with thin walls, quite livid. Very little and very gentle taxis tried. Operation; sac opened; serum and a dark-brown knuckle of intestine; no adhesion; stricture divided, and bowel easily reduced. The next day she rallied. On the fourth day she died, with vomiting, tenesmus, and collapse. No autopsy could be obtained.

Case IV.—Chas. M., æt. 35. Strangulated inguinal hernia for twelve hours; always reducible previously. Now, vomited ever since strangulation. Left side of the scrotum as large as the fist; tense and tender. Attempts at taxis were made by Dr. Thaxter, and in

the inverted position, in vain. Ice was applied with no better effect. Tumor cut down on by a long incision; sac opened. A large mass of omentum protruded, and in its folds was strangulated a fold of intestine, intensely congested. No stricture elsewhere. The hernia was easily reduced, and the patient recovered without a bad symptom.

Case V.—Mrs. B. C., æt. 42. Strangulated femoral hernia; twenty-four hours' duration. Now, pulse weak; skin cool and clammy; retching, dragging pains and prostration. A small, hard tumor in left groin, below Poupart's ligament. Taxis was used under ether without avail. The pulse became so feeble that it became necessary to stimulate her, and to operate at once. The stricture was found to be at the saphenous opening, and the hernia was reduced without opening the sac. She slept well that night, had three dejections next day, and recovered without an unpleasant symptom.

It thus appears that of these five cases of operation for strangulation, in two the cases were long delayed before the operation, and both died. In three the operation was done after a short period of strangulation, and only one died. Besides this, we find that of two of the shorter cases, one, with a strangulation of only twelve hours, and much the stronger woman, died. The other, with a strangulation of twenty-four hours, and a feeble woman, recovered. In the former, long-continued and violent taxis was used, and the bowel found chocolate colored. In the latter, very moderate taxis; and no bad symptoms followed the reduction.

This limited series of cases would seem to point to the general conclusion, that long delay and violent taxis, before operation, may be even more fatal than strangulation itself.

SOME OF OUR HABITS OF DOMESTIC AND SOCIAL LIFE.

By Stephen Salisbury, M.D., Brookline.

[Concluded from page 464.]

It may be considered entirely superfluous, at this day, when the subjects of ventilation, pure air, and the necessity of ablution have been on the tongues of a large portion of the people in connection with the anticipated approach of cholera, for me to say anything with regard to them. As a general rule, the American or New England people have *always* been in advance with regard to the appreciation of fresh air and the avoiding of all sources of uncleanliness. It is not so, however, we all know, with all of our citizens, and many require frequent supervision in this respect. I met with a striking illustration of the evil influence of the neglect of the sanitary laws with regard to the renewal of air and of cleanly habits in an epidemic of cerebro-spinal meningitis, which occurred near the limits of Brookline and Roxbury in the course of last winter.

Nearly all the cases which I saw were residents in rooms which

were too close, and were lying in bedrooms the air in which was repulsive from the odor of the clothing and human exhalations, to an extent which under any circumstances would have suggested the fear of poisonous infection, and which rendered the remaining at the bedside long enough to make a proper investigation of the cases an act of self-denial greater than even a physician often has to perform. One of the cases was the owner of a house, and was rejoicing in that degree of prosperity which enabled him to keep pigs in his cellar, and the milkman informed me that before and during the sickness the odor in the house was so disgusting that he could scarcely endure to enter it in order to leave his milk.

Two years since, I was called to visit several members of a family who were suffering from an attack of cholera morbus. Five were attacked simultaneously, and three of the cases were attended with severe pain at the epigastrium, frequent dejections and vomiting, with great depression of strength; all had more or less diarrhœa and vomiting. In searching for the common cause which might have affected them, no article of food could be suspected, unless it was a piece of roast beef of which all had partaken. Upon examining what remained of the beef, I could not discover anything which would warrant the supposition that the disease had been occasioned by it. Some one suggested that nitre, which was said sometimes to have been used in the preservation of fresh beef, and might have been then, as it was hot weather, had been the cause of the malady. But a subsequent discovery of defect in the drainage afforded a more probable cause. In looking into the cellar of the house where the sickness occurred, it was ascertained that a leakage had taken place from the vault into the cellar, and there was some reason to believe that it had affected the water which the family had been using; either of which was evidently sufficient to endanger the health of persons within its influence. The leakage into the cellar, as was stated, had occasioned an offensive odor in the house at times, and I think there is little reason to doubt that it was more instrumental in producing the disease than the nitre which might have been in the beef. After all, however, there was a mystery about the attacks which was not entirely cleared up, as those who came in to assist the family were more or less affected. Thus it has been, and probably will be in other epidemics, particularly of malignant typhus and dysentery. So large a proportion of them have been traced to some local cause which furnished offensive exhalations, that it is not unreasonable to infer that many may be attributed to or aggravated by this cause.

Among the many influences injuriously affecting health arising out of our social habits and customs, the prevalent method of education forces itself upon us as one of the most prominent. Those who are engaged in it are quite liable to become enthusiastic, and to exceed the limits of prudence in extending its advantages. A

recent writer has remarked that a man or boy has *too much* education when in developing his mind he has destroyed the health of his body, and it would seem that the ultimate usefulness of many children in our community has been diminished by inducing them to devote more time to books than was best for their health.

Our public schools are justly the pride and boast of New England; yet is there not reason for the belief that they as well as our colleges are responsible for some of the physical imperfections which we meet with? It was a ludicrous remark of Frederick the Great, that man was more adapted for a postilion than a philosopher, but it is admitted as a serious truth that a high state of intellectual cultivation is rarely attained but at the expense of bodily health.

There is no reason for this being so; the many instances we have had of self-educated men, who have not had the advantages of colleges, furnish sufficient evidence that a high state of intellectual culture and mental vigor may be attained, and at the same time a due share of physical strength to sustain them.

How often do we hear remarks similar to the following, which I quote from a recent sketch of an eminent member of Congress. "It was a great advantage to the subject of our sketch, that in his youth he knew what hard work was; of great *value*, in more ways than one. In the first place it laid the foundation of good health and a sound constitution. Then again it enabled him to understand, far better than he otherwise could, the wants, feelings and peculiar desires of the working people of our land." Are not these of value to a merchant or a professional man as well as to a member of Congress? It will certainly be acknowledged that to a physician such a preparation would be inestimable.

Our schools are too often managed with a belief that the true aim of education, is to introduce to the minds of children the greatest amount of knowledge of the various branches taught, and in the most expeditious manner possible, with little regard to the physical capacity and health of the child. By this process the mind may possibly be improved, yet it is very much to be feared that the result may be not only a deterioration of the mental powers, but likewise a diminution of subsequent usefulnes and happiness. Confining scholars to study during five continuous hours of the day in school, and giving them tasks which require two or three hours of study at home, is carrying education to the verge of excess, and inflicting an injury to the physical system of the child, the effect of which it will feel in every future exertion, and exposure during after life, and by which it may perhaps be unfitted for many of the ordinary avocations. When the efforts of the scholars are stimulated by emulation, still more injurious effects may result. The mind is not improved in exact proportion to the number of hours devoted to study, or to the amount of knowledge acquired. It may comprise an arithmetic, a dictionary, a thorough knowledge of Latin and Greek, and yet be

very badly prepared for the struggle of life. *Over study* often defeats its object; it causes a kind of atrophy of the brain, or, as Rousseau expresses it, "returns man to his original stupidity." How can this evil be modified or remedied? Not by gymnastics, for experience has shown that very few have the patience and resolution to persevere, and those who do continue their use are very liable to produce permanent physical injury from too violent or excessive exercise. *Walking* is open to similar objections; it is too uninteresting to be continued as a daily resource, and when used occasionally is often excessive. Simple exercise for exercise sake soon becomes irksome, and ceases to be beneficial. Armstrong says:—

> "He chooses best whose labor entertains
> His vacant fancy most; the toil you *hate*
> Fatigues too soon, and scarce improves your limbs."

Active sports, such as cricket, ball, and other well-known recreations, are efficient in relieving the restless craving for motion which is evinced by the young, and certainly should be encouraged. They, however, only partially remedy the difficulty; for those who need the exercise the most, are very apt to be the least disposed to engage in it, and even shrink from the sports which the robust children enjoy so much. Would it not be well to advocate the substitution of a regular system of useful manual occupation for mere play, in our various educational institutions? "For not only would the physical organization be thereby strengthened and developed, but the mental energy and dignity of character would be increased, and the mind become better fitted for independent action."

Why should not a portion of the time assigned to the school hours be devoted to practical instruction in some of the mechanical arts for boys after arriving at a proper age, and in some corresponding occupation for girls?* Does any one doubt that both would have a better knowledge not only of how to make themselves useful in life, but even of the branches which they have studied in books, for their bodies as well as their minds would thus be invigorated. It is true, all cannot practise the mechanical arts, but will not all be better educated for being acquainted with them? Whether this suggestion of combining manual with intellectual education be considered Utopian, or really practical, it is certainly highly important to bear in mind that in education the muscular system, as well as the intellectual, imperatively demands exercise; and that without it there must necessarily be decay. It behooves us also to remember that violent and fitful exercise, occasionally, is by no means to be recommended; for instance, a long walk or a great effort at rowing after a week of inactivity. This is nothing new, for Galen inveighs against violent exercise in gymnastics; and Dr. Combe, in speak-

* The girl who can solve a problem in Algebra, and who cannot readily perform the ordinary household duties, will probably prove to be a more pitiable than valuable member of society.

ing of students and other sedentary persons in his own country, says, "It is no unusual thing for youths, still weak from rapid growth, and perhaps accustomed to the desk, to set out in high spirits at the rate of twenty or twenty-five miles a day on a walking excursion, and (in consequence of carrying exercise to that degree in which *waste exceeds nutrition*) to come home so much worn out and debilitated that they *never* recover."

In this climate, where three fourths of the disorders to which the constitution is liable are said to be considerably influenced by aerial transitions, and the chief defence against the atmospherical changes is clothing, the subject of *dress* demands much attention. *Men* seem to be very willing to conform themselves in their dress to the peculiarities of the climate, and to allow fashion and common sense to have some affinity with each other. It is not always so with the gentler sex, for they often clothe themselves and their children more as if they were endeavoring to ascertain how much abuse the constitution would endure, than merely to give protection with suitable garments.—There is still reason to believe that female dress errs in one important particular, even when unexceptionable in quantity and material. Notwithstanding all the lecturing upon this subject in past times, the dress being made to fit too closely on the upper part of the body, is now, we fear as much as ever, considered to be essential to the good looks of young and middle aged women. Too frequently, the ribs are compressed and the form distorted by tight lacing, and when, as is often the case, this is commenced before full growth has been attained, the capacity designed for the lungs and some of the abdominal organs is permanently and seriously diminished, and muscular action paralyzed. If we could read a revelation of the number of those whose lives have been made miserable, and health destroyed by this error, either directly or by the fault of parents, we should doubtless be overcome with astonishment. This, associated as it often is, with the expansive hoops which tend to deprive the lower extremities of the protection which they require, leads one often to wonder at the endurance of the female constitution. In a severe winter wind ladies are sometimes left with scarcely any other protection for the lower limbs than thin cotton.

As for young children, in viewing their dresses cut low in the neck, and so short as to expose the legs from the knees downwards, we see one of the fertile sources of mortality. It seems, however, that, in some instances at least, it requires more than *even* a *physician's* authority to correct this evil; for one lady, whose attention was called to the insufficiency of her children's dress, by her medical attendant who had often been called to prescribe for bronchitis and tonsillitis in the family, remarked she herself had lived through it when a child, and she thought *her children* might. Important as it is, that children should be sufficiently clothed, and that their dress should be adequate to protecting the body from an abiding sensation

of cold, we must not forget that warmth is not to be sought in clothing alone. If too much dependence is placed upon an excess of thick clothing, exercise, which is another essential means of warmth, is impeded and rendered too fatiguing. By such excess, also, the system is rendered susceptible of injury from the slightest accidental exposures or variations of temperature and moisture; and to an extent equal to that caused by living in rooms heated to too high a temperature.

I have thus endeavored to draw the attention of this Society to a few of the most important influences upon health and disease; and imperfect as my effort may have proved, if any of these suggestions should lead to a more thorough consideration of the subjects discussed, or tend to more satisfactory conclusions with regard to any of them, our time will not have been lost.

RATIONAL MEDICINE AT GUY'S.

To the Editors of the Boston Medical and Surgical Journal.

THE following extracts, from a report, in the London *Lancet*, of a lecture, at Guy's Hospital, on the Theory and Practice of Medicine, by S. Wilks, M.D., Physician to the Hospital, though seeming repetitions of what has been so often said in this vicinity for years past, are nevertheless worth reprinting as showing the progress of rational medicine in conservative old England.

"The medical man is ceasing to be regarded only as a curer of disease; but he is looked upon as a custodian of the public health, and also as a medical adviser in private families to exercise his knowledge for their good."

"The doctor so often steps in with his remedies that it is difficult to ascertain what changes are due to the natural progress of events, and what to the remedies. He often attributes to his own drugs what is due to Nature; otherwise how does he account for the same result when so various means have been employed?"

"You may have heard of the expressions, natural history of disease, and of the expectant plan of treatment; and you may have heard also both terms held up to ridicule as indicative of a want of faith in medicine; but you only require to be reminded that such terms are merely the more correct expressions of opinions which are more or less vaguely held by all practitioners of our art. For instance, choose any medical man who you know possesses the greatest confidence in the efficacy of his medicines to cure most of the maladies which come under his notice, and place before him cases which you feel sure will be benefited by his superintendence—give him, for example, a case of early phthisis, a case of sore throat, a case of delirium tremens, and a case of fever. Would it be unreasonable for any

unprofessional person who had heard the doctor's affirmation, to expect to see these persons well on the following day, or on the third day, or on the fourth day, or at the end of a week? Such an expectation might then, for the first time, cause the doctor to realize the fact, which he had never until then placed clearly before him, that he had never, with his most ambitious hopes, anticipated a result before certain periods, differing in each case—that he never intended to declare that his patient's cynanche would be well before two or three days, or that the treatment of the delirium tremens might not take an equally long time; as for the fever, of course he did not hope to cure it under a week or two; and as for the phthisis, he intended only to promise a change in some weeks or months. Here, you see, *time* is admitted, even by one who has the greatest faith in his medicines, to be an important element in the cure; and therefore all we ask for is, to be informed *what time?* In what time do you hope to cure fever—in what time do you hope to cure delirium tremens? &c. The answer in many cases would be, that the time corresponded with the natural termination of the disease; but this we want to ascertain with precision. If a disease pursues a certain course—if it has its origin, its progress and decline, surely we ought to know all about these before we can step in with our remedies, and assert that we have altered its course. Does it not seem to you absurd for any one to declare that he has changed or arrested the course of a disease, when he is utterly ignorant of what the natural course of that disease is? Yet absurd as it appears, we are in that position. It therefore behooves us as a first necessity to know the natural history of disease before we attempt to cure it. The best advances which we have made of late in our art have been founded on this knowledge, and it is none the less an art if it has taught us to do less rather than more."

"We have diseases, such as fever and the exanthemata, for which we know no remedy, but simply watch the progress of the case; the aid of the medical man, however, being equally beneficial. There are still other affections for which have no specifics to produce a direct cure, nor are we utterly helpless in assisting the patient, but we adopt measures based on a true scientific method, by which we lead the sufferer to health. . . . . Such cases and their mode of treatment place our profession on a sure basis, and constitute the best examples antidotal to all quackery."

"The patient has recovered under the judicious treatment of the doctor, but the medicines were only indirectly operative. If you believe that they are curative, and state as much to your patient, you are not raising your position, but lowering it. You are giving credit to the medicines which you should give to yourself. It is your skill to which the patient owes his life, and not to some specific medicine of whose operation you know nothing. The more power you attribute to the medicine and the less to your own

knowledge, the more you resemble the quack; and you lower your art, not raise it."

"There may be art when no medicine is given, and I will give you a striking instance in illustration." [Case.] . . . . . I call that true art, and art based on knowledge. Every other method except that which is founded on true knowledge, is associated with some remedy. What remedy had this young medical man to whom his friend was indebted for his life? He had none at all, if you mean medicine or a drug by a remedy; his remedy, indeed, was the very absence of medicine. And thus it is with us; we have no scientific therapeutics properly so called, but we take each case on its merits, and the highest art is sometimes seen, as in this case, when we give no medicines at all. Do not let me hear that called heroic treatment where much and powerful medicine is given. Such treatment is more often dictated by ignorance and cowardice. Nothing is more easy and more often approved of by your patients than to give plenty of medicine, to do a great deal for them, and to tell them to live better. . . . Don't call that heroism; it is cowardice, for you dare not oppose the prejudices of your patient. I call that young man whom I have mentioned a hero, and his was the heroic treatment—to insist on a man lying in bed, eating nothing, and taking no medicine."

"I have alluded to homœopathy because it is the best example I can choose of false doctrine, and also because I have heard it stated that orthodox medicine is tending in that direction; that even the doctors of Guy's Hospital are tainted with the heresy. Those who have hinted at this know not what we teach, for nothing can be more diametrically opposite than the instruction which you have here and that of this absurd system. . . . Every system of quackery depends upon its special mode of cure. Take that away, and the whole bubble bursts. Is it so with us? Throw our Pharmacopœia in the fire. Has our system ceased? Can we make no use of our knowledge? Have we no resources left? Mind you never allow any one to compare orthodox medicine with any system of quackery. The only point of comparison can be in reference to cure. Theirs is a given method; ours is not. Never allow yourself to be called by so absurd a name as allopathist, or by any other term which implies a particular mode of treatment or physic-giving. We cannot be ticketed in that manner. We have much larger means at our disposal than the Pharmacopœia can give. Destroy it, I say: but Guy's Hospital remains, the professors remain, and you practitioners remain. That book is not the foundation on which we practice; and, therefore, although I say it with the utmost respect to the individual members of the Apothecaries' Hall, I solemnly believe that the founding of the medical profession upon a company of druggists was one of the most lamentable events that could ever have befallen a learned body. Physic and medicine the

basis on which we depend! Could anything be more absurd or mischievous? Anatomy, physiology, pathology, and the study of disease is our foundation. Quackery is founded on a given system of physic-giving; we are superior to it. Orthodox medicine is an art based on a knowledge of disease."

"Do not misunderstand me, and think that I have no faith in medicines, and wish to implant a similar scepticism in your minds. I believe as much in the efficacy of many drugs as does any member of the profession. I wish merely to impress upon you the necessity of regarding them in their true light, as a means to assist us in the treatment of disease, and not in the quackish sense of remedies, which savors of mysticism."

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, JULY 12, 1866.

DR. SALISBURY'S DISCOVERY OF THE CAUSE OF INTERMITTENT FEVER. EUROPEAN COUNTER-CLAIMS.

Our editorial notice, some time since, of Dr. Salisbury's discovery of the cause of intermittent fever, appears to have been the means of making it known, through the *Union Médicale*, to many European readers. The article in the *Union* was soon followed, as we have already announced, by a claim of priority of discovery by Dr. Lemaire, of Paris. Curious and interesting as his researches were, we did not consider his claim fully sustained, as, although he suggested that the poisonous influence of marsh miasm might be due to an organic cause, and although he had detected organic germs in the gaseous emanations from decomposing matter in the laboratory, and had collected similar bodies from the air over marshes, he did not search for them in the secretions of the sick, nor point out any connection between their presence and the diseases in question. The subject has excited much interest in Europe, and in the *Union* for the 7th of June we find further reference to it, and some new facts of a very remarkable character. It is of so much importance practically, as well as of so much scientific interest, that we offer no apology to our readers for translating the article in full:—

"Numerous communications, of different kinds, have followed the publication in our Journal and everywhere repeated, of the observations of Professor Salisbury, and the claim of priority by Dr. Lemaire, with regard to the cause of intermittent fever—or marsh fever, to speak more correctly. Without noticing all these communications, some words are indispensable to set right those writers of the American press, who, in their astonishment at the feeble scientific repute obtained by the demonstration of M. Lemaire of the febrigenous sporules in the effluvia of marshes—a silence which they find confirmation of in our ignorance of the fact—are inclined to suspect the facts and to undervalue their reality. I should astonish them much more were I

to reproduce the school recollections of an honorable associate, attributing the discovery of this fact to Gratiolet, and dating it much earlier. But exact, written, public documents, official communications like those of M. Lemaire, can alone be invoked to establish such priority. Forced thus to yield to the precision of such details, our correspondents of the Boston Medical and Surgical Journal still claim, for the glory of their compatriot, the merit of having specified, demonstrated the plant, the *alga* which produces these morbid sporules. Granted; but this discovery was made long since, empirically no doubt, and without due account being rendered of it, but nevertheless demonstrated with just as much evidence as by the learned American micrographer.

"'While I was a student,' says Dr. Van den Corput, 'I proved in my own person, and on many different occasions, that after keeping in my bed chamber algæ and marsh plants, contained in a vase standing in a large basin, I invariably felt, some days after, genuine attacks of intermittent fever.' From that time it has been a question with him whether the cause of intermittent fevers was in the gaseous emanations of a hydrogenous nature, according to Rigaud, de l'Isle and Julia, or whether it did not exist in the microscopic algæ, the sporules of which were held in suspension by the watery vapors or raised by the wind. Time alone has been wanting to him to clear up these doubts by experiment."—(*Journal de Médecine de Bruxelles*, April, p. 230.)

In support of this assertion by the learned editor-in-chief, Dr. Hannon is none the less explicit.

"'In 1843,' he says, 'I was studying at the University of Liége. The learned Professor, Charles Morren, had excited me to such an enthusiasm in the study of the physiology of the algæ of fresh water, that I had encumbered the windows and the fire-place of my bed-room with plates full of ulvaceæ, confervæ, &c. It was a great pleasure to communicate to my professor my observations upon the algæ, and every time I did so, he said to me, "Look out for the period of fructification; the spores of the algæ cause intermittent fever. I have proved it every time I have studied them too closely." As I cultivated my algæ in pure water, and not in water from the marsh where I had collected them, I did not attach any importance to these observations. I caught the disease. A month later, at the time of fructification, I was seized with a chill, my teeth chattered—I had the fever; it lasted six weeks, and I was finally cured of it by Dr. Alphonse Leclercq at Brussels, for I had left Liége.

When I again saw the Professor of Botany, Charles Morren, I told him what had happened to me. "You see," he said, "it is as I told you; you are not the only one whom I have seen take the fever in this way."—(*The same publication*, May, p. 497.)

"Brought out by the experiments and observations of Prof. Salisbury, these reminiscences, far from weakening them, confirm their reality and value, and ought to stimulate so much the more to their repetition. If truth belongs to all time and all places, it should be freed from the trammels of ignorance to take its legitimate flight and shine in all its glory. Witness the observations, the remarks, the trials made of grand discoveries, like the circulation of the blood, vaccine, auscultation, anæsthesia, before a single spirit or one powerful voice

has brought them to a productive issue, established them on a scientific foundation and fastened to them his name. All of the glory of a work, which is often one of an age, of centuries and of numerous laborers, is thus fixed upon one alone; and that of Prof. Salisbury will be great if he has definitively demonstrated the cause of intermittent marsh fevers."

It is with extreme gratification that we publish the above statements, for they go very far to establish the claim which Prof. Salisbury has set up—to mark *him* as the man, who, by a more methodical process, a more patient and elaborate investigation, a more complete train of inductive reasoning, has finished the discovery, and, to borrow the figure of our friend of the *Union*, stamped it with his name. Indeed, if Prof. Salisbury's paper contains the complete history of his researches, he would seem to be entitled to unusual credit; for it was not from any suggestive hint given by another, not from any unfinished work of other investigators, but from his own original, unassisted thought that he was led to take up the study which culminated in a discovery so complete in its details as to make its announcement to the world one of the most important in medical history.

Propagation of Cholera.—From the report of M. Briquet on Cholera, read to the French Academy of Medicine at the meeting of March 27th, we translate the following passages. In speaking of the disease as it has appeared in different epidemics in France, he says:—

"These epidemics have never broken out in the interior; they have always penetrated by the frontiers, sometimes by the north, sometimes by the east, sometimes by the south. Each one of them has followed a slightly different track, of which the constantly increasing irregularity has been in direct relation with the development of railroads and the rapidity of communications. Some departments of the interior have alone escaped up to the present time any visit from this pestilence, and, what is worthy of note, these departments are counted among the poorest and most unhealthy. . . . . As for the mode of propagation of this disease, statements are extremely contradictory; at the same time it results from the analysis of very numerous facts, that the disease extends from neighborhood to neighborhood, from house to house, from commune to commune, &c. Cases not less imposing by their number and by their authenticity would seem to establish also that cholera is transmissible from individual to individual. Nevertheless the Commission does not wish to pronounce upon this difficult and obscure subject; it limits itself to the exposition of the facts, leaving to others the interpretation of them."

Preventive and Remedial Treatment of Epidemic Cholera.—The New York Academy of Medicine, at the meeting held June 20, 1866, adopted the following preamble and resolutions offered by Dr. E. Harris:—

Whereas, The New York Academy of Medicine has endeavored to promote among its fellows, and throughout the medical profession, a spirit of exact inquiry into the prevention and remedial treatment of epidemic cholera:

Resolved, That this Academy hereby expresses its confidence in the utility of general hygenic measures as the best means of protection against the pestilential

prevalence of cholera in any locality where it makes its appearance; and that the most thorough scavenging, cleansing, and disinfection, are absolutely necessary means of averting this pestilence in the cities and populous towns of our country at the present time.

Resolved, That in the judgment of the Academy, the medical profession throughout the country should, for all practical purposes, act and advise in accordance with the hypothesis or the fact that the choleraic discharge and "rice-water" discharges of cholera patients are capable, in connection with well known localizing conditions, of propagating the cholera poison, and that rigidly enforced precautions should be taken in every case of cholera to permanently disinfect or destroy those ejected fluids, by means of active chemical agents. Also, that with the same object in view, the strictest cleanliness of person and premises should be enforced upon all who have the charge of the sick; also, that all privies, water-closets, and cesspools, should be kept thoroughly under the control of disinfectants.

Resolved, That we regard the nature and the causes of cholera infection, so far as the sick or their discharges can propagate it, as being so susceptible of control that there should be no fear or hesitancy in the personal care of the sick and all that pertains to them.

Resolved, That immediate and thorough cleansing and disinfection of all persons, clothing, and things that have been exposed to the discharges or persons of the sick with cholera, constitute the chief end and object of any rational Quarantine or external sanitary police regulation against cholera.

Resolved, That for the purposes here mentioned, an external sanitary police is desirable in all great maritime and river towns, but that such sanitary regulations need not seriously embarrass commercial intercourse and the interests of trade.

Resolved, That the main source of protection against epidemic cholera at the present time is to be found in the vigilant and effective operation of sanitary measures, municipal, domestic, and personal.

Resolved, That the New York Academy of Medicine cordially invites the physicians of every city and village throughout our country to urge the immediate adoption of adequate measures of sanitary protection against the introduction and ravages of cholera, and that to this end we pledge to our brethren and the public the hearty and continued coöperation of this Academy.—*Med. Record.*

Although the above resolutions are not quite as strong as we should have liked, and are somewhat equivocal with regard to quarantine, we yet welcome them as evidence that the light is beginning to shine in some places in the profession where there was obscurity, to say the least, before.

The Cholera on Board the England and Helvetia.—The accounts of this outbreak, as reported at the time, attributed it to the German emigrants on board; and in the *Medical Times and Gazette* we find corroborative statements in a letter from Mr. Hamilton, of Liverpool, to the *Times*, quoted in the former. The writer says:—

"Without recapitulating the facts already published regarding this outbreak, I would draw attention to two or three points. It is clearly established that the cholera appeared first among the German passengers, and that it spread rapidly among them—satisfactory proofs that they brought the disease on board, as the *England* [the steamer that brought the cholera to Halifax] is quite a new vessel, this being her first voyage. Now, where did these Germans come from? From the very country where we learn by the latest intelligence that cholera has made its appearance—namely, Holland. They were East Frieslanders, and have been described to me as of the lowest class, stunted in growth, filthy in habits, dressed in linsey-woolen clothing, and, in

preference to the wholesome food provided for them, subsisting almost entirely on their *saur-kraut*, an abominable mess, of itself sufficient to disorder an Englishman's stomach. I mention these particulars, as, with overcrowding superadded, what happened only confirms an hygienic axiom, that if such conditions exist such results are pretty sure to follow."

And in a subsequent number of the *Times and Gazette* we find the following statement concerning the same emigrants and those in the Helvetia [the steamer bound to New York, which returned to Liverpool on account of an outbreak of the disease]. "The manager says that the emigrants by the *England* were the dirtiest of the whole lot which have passed this year. If he be correct, the statement is important, for the Dutch and Germans on board the *Helvetia* are the dirtiest people in their habits whom I have ever seen. The surgeons assure me that not unfrequently they rinse out with water the pan used for the reception of the excrement and urine of their children, and then employ it as a cup for drinking and for their dinner mess; and no power or persuasion will prevent them from leaving their dejections on the floors, the bedding, or the clothes."

The Death of Dr. Mussey—Action of the Medical Profession.—A meeting of the medical profession of Cincinnati was held at the Medical College of Ohio, June 29th, 1866. Dr. George C. Blackman stated the object of the meeting was to express the deep-felt sentiments of the profession of this city in reference to the life and character of the late Reuben D. Mussey; whereupon Dr. David Judkins was elected President, and Dr. Samuel Sexton, Secretary of the meeting.

On motion, a committee of five, consisting of Drs. John A. Murphy, George C. Blackman, M. B. Wright, John Davis and Jesse P. Judkins, were appointed to prepare a preamble and resolutions, expressive of the sense of the meeting. The following were then presented and adopted:—

"*Whereas*, In the providence of God our distinguished friend and brother, Dr. R. D. Mussey, has been removed to another world, we express our deep sense of sorrow. For more that fifty years he was a successful surgeon and physician, and a benefactor to humanity. He added greatly to the progress of the art and science of medicine. Equally distinguished as a physician and surgeon, his whole life was characterized by the highest sense of moral duty, and in all relations, professional and social, uprightness and purity of motive and action characterized him. Few men have passed in the profession a better or more useful life. To labor, with him, was a duty, and to do good, especially to the poor, was his highest pleasure.

"To many of us he was almost a father, who not only by his sound medical teaching, but the kind and tender interest, the sober advice, and the correct life, taught us to love him, and to imitate him in all good works. Known throughout this country, as well as in Europe, his loss will be regretted by all: therefore be it

"*Resolved*, That in the death of Dr. Mussey the profession of Cincinnati has lost a father, a great surgeon and physician, the city a good man, and humanity a true friend.

"*Resolved*, That a copy of this preamble and resolutions be forwarded to the family by the Secretary, with the sympathy of this meeting in their grief."

Numerous gentlemen of the medical profession availed themselves of the opportunity to bear witness to Dr. Mussey's great eminence as a surgeon and excellence as a man, among whom we may mention

Drs. Murphy, J. P. Judkins, George C. Blackman, M. B. Wright, and the President. Before adjourning, Dr. George C. Blackman was appointed to prepare and deliver before the profession and others, at his earliest convenience, an address on the life and services of Dr. Mussey.

Ready Method of Purifying Water.—We wonder that travellers do not carry with them a little bottle of solution of permanganate of potass, a few drops of which would speedily purify any water. A friend of ours, who has just returned from India, tells us he has derived the greatest benefit from its employment. At stations where the water was turbid, and tasted and smelt of decaying organic matter, he found that the addition of a few drops of the solution of the permanganate made it in a few minutes as clear and sweet as spring water.—*Medical Times and Gazette.*

The Emperor of France has recently conferred upon Dr. J. Marion Sims the Cross of the Legion of Honor, in acknowledgment of his meritorious services rendered to the great cause of obstetrical surgery. If report speaks the truth, the highest lady in the Empire has had the benefit of his professional services.

Appointments.—Dr. Wm. H. Thorndike, of East Boston, has been appointed one of the Visiting Surgeons to the Boston City Hospital, in place of Dr. Charles H. Stedman, deceased.—Dr. H. B. Sands has been appointed Attending Surgeon at Bellevue Hospital, New York, *vice* Dr. Willard Parker, resigned.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, JULY 7th, 1866.

DEATHS.

	Males.	*Females.*	*Total*
Deaths during the week - - - - - - -	30	27	57
Ave. mortality of corresponding weeks for ten years, 1855—1865	37.4	33.8	71.2
Average corrected to increased population - - - - -	00	00	77.64
Death of persons above 90 - - - - - - - - -	0	1	1

JOURNALS RECEIVED.—Medical Record, Nos. 7 and 9.—Medical Reporter, Nos. 7 and 8.—Medical and Surgical Reporter, Nos. 22–25.—New York Medical Journal for June.—Richmond Medical Journal for June.—Atlanta Medical Journal for June.—Southern Journal of Medical Sciences for June.—Dental Cosmos for June.—Druggists' Circular for June and July.—Journal of Materia Medica, Pharmacy and Chemistry for June.—Chicago Medical Journal for June.—Chicago Medical Examiner for June.—L'Union Médicale, Nos. 55–68.—Journal of the Society of Arts, vol. xiv., No. 702.—New York Eclectic Medical Review for June.—Buffalo Medical and Surgical Journal for June.—New England Medical Gazette for June.—Chemist and Druggist, No. 82.—Journal de Médecine de Bordeaux for May.—London Lancet for June.—American Journal of Pharmacy for July.

MARRIED,—In this city, June 28th, James B. Sevory, M.D., of Farmington, Me., to Miss Emma A. Bass, of Boston.

DEATHS IN BOSTON for the week ending Saturday noon, July 7th, 57. Males, 30—Females, 27. Accident, 1—aneurism, 1—apoplexy, 1—disease of the brain, 3—bronchitis, 1—cholera infantum, 2—cholera morbus, 1—consumption, 12—convulsions, 2—croup, 1—diphtheria, 1—dropsy, 1—dropsy of the brain, 1—dysentery, 2—erysipelas, 1—scarlet fever, 1—disease of the heart, 3—infantile disease, 2—disease of the kidneys, 1—inflammation of the knee, 1—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 2—measles, 1—premature birth, 3—suicide, 1—thrush, 1—tumor, 1—unknown, 6—whooping cough, 1.

Under 5 years of age, 22—between 5 and 20 years, 5—between 20 and 40 years, 13—between 40 and 60 years, 10—above 60 years, 7. Born in the United States, 40—Ireland, 13—other places, 4.